EXAMINING THE RELATIONSHIP AMONGST MY VLE, LEARNERS' COMPETENCY, AND EXAM ANXIETY IN OUM: EMPIRICAL FINDINGS USING STRUCTURAL EQUATION MODELLING

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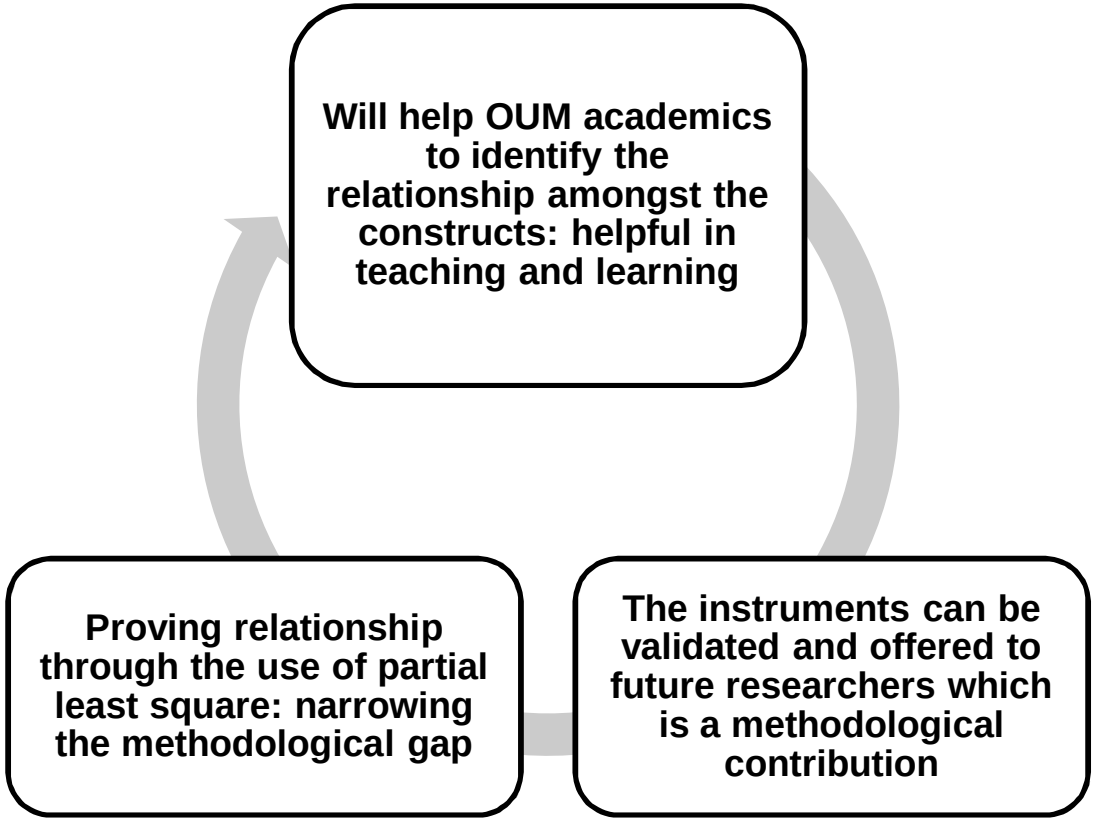
RESEARCH OBJECTIVE

The main objective of this paper is to examine the relationship amongst my VLE, learners competency and exam anxiety of OUM learners.

RESEARCH CONTRIBUTIONS



LITERATURE REVIEW

Research instrument is developed based on review of previous literature

(Kara, 2009; Ni, 2013; Odeshi, 2014; Rhema & Miliszewska, 2014)

UNDERPINNING THEORY:
VROOM'S EXPECTANCY THEORY

- **Efforts**
- **Performance**
- **Outcome**

RESEARCH METHODOLOGY

Research instrument was developed from the literature. Items were refined following an interview with a Professor from OUM to justify the content validity.

Convenience sampling used. Students of OUM were the respondents.

Data was collected during the exam period. Face to face method was used

Descriptive analysis, validity assessment and reliability analysis were conducted

Partial least square using bootstrapping concept used for hypothesis testing (102 samples bootstrap to 5000 samples)

STRUCTURAL EQUATION MODELLING

The study of Nachtigall et al. (2003), 60% of respondents in their research are expected to use SEM more frequently in the future as a statistical tool.

To date, the citations of Kenny & Baron (1986) can be found in more than 6000 studies because mediation basic logic was introduced by them as mentioned by Iacobucci et al. (2007).

Based on the strong reasons provided by Wang (2012, pg 1), traditional methods such as multiple regression violates the basic assumptions of statistics, which is to ignore the measurement error of variables included in the model when the independent variable is correlated to the model residuals.

SEM can provide the accuracy of model by integrating functions in one single umbrella (Bagozzi & Yi, 2011; Nachtigall et al., 2003), examining the reliability of measures in tests of hypothesis (Bagozzi & Yi, 2011) and overcoming the problem of non-normal data (Oke, 2012; Gao et al., 2008).

THE BEAUTY OF BOOTSTRAPPING

This is done by randomly resampling with replacement from the sample many times in a way that mimics the original sampling scheme.

Example: probability of a coin toss!

DESCRIPTIVE STATISTICS

AGE	Frequency	Percent
18-24	22	21.6
25-34	50	49.0
35-44	26	25.5
45-54	3	2.9
Above 55	1	1.0
Total	102	100.0
GENDER	**Frequency**	**Percent**
male	32	31.4
female	70	68.6
Total	102	100.0
MANAGEMENT_LEVEL	**Frequency**	**Percent**
non executive	33	32.4
executive	29	28.4
management	24	23.5
professional	16	15.7
Total	102	100.0
EDUCATION_LEVEL	**Frequency**	**Percent**
certificate	5	4.9
diploma	23	22.5
bachelors	68	66.7
masters	4	3.9
doctoral	2	2.0
Total	102	100.0

DESCRIPTIVE STATISTICS

CGPA	Frequency	Percent
0.00-2.49	21	20.6
2.50-3.49	64	62.7
3.50-4.00	17	16.7
Total	102	100.0
TIME_VLE	**Frequency**	**Percent**
0-4 hours	57	55.9
5-9 hours	35	34.3
10-14 hours	7	6.9
Above 15 hours	3	2.9
Total	**102**	**100.0**
TIME_EXAM	**Frequency**	**Percent**
0-4 hours	24	23.5
5-9 hours	51	50.0
10-14 hours	19	18.6
Above 15 hours	8	6.9
Total	102	100.0

MEASUREMENT FOR VLE EXPERIENCE

NO	STATEMENT
	Currently, the virtual learning environment is effective because:
B1	**I have greater access to the learning process**
B2	**I have greater experience in my studies**
B3	**I can save more time**
B4	**I have an improved motivation level**
B5	**I got more involved with the module**
B6	**I feel in control in my learning**
B7	**I am learning more efficiently**
B8	**I am able to learn more conveniently**
B9	**I feel that the technology has enhanced my learning**
B10	**I am more active in my learning**
B11	**I find it easy to use**
B12	**I have experienced very little technical problems**

MEASUREMENT FOR ACADEMIC COMPETENCY

NO	STATEMENT
C1	I am able to manage the academic course load
C2	I can easily understand course material taught
C3	I find the courses taught interesting
C4	I am enjoying the online classes offered
C5	I always do my best to understand the course material taught in an online class
C6	I can easily manage the amount of study material taught for an exam
C7	I do not find it difficult to prepare for examinations
C8	I can easily cope with examination tension

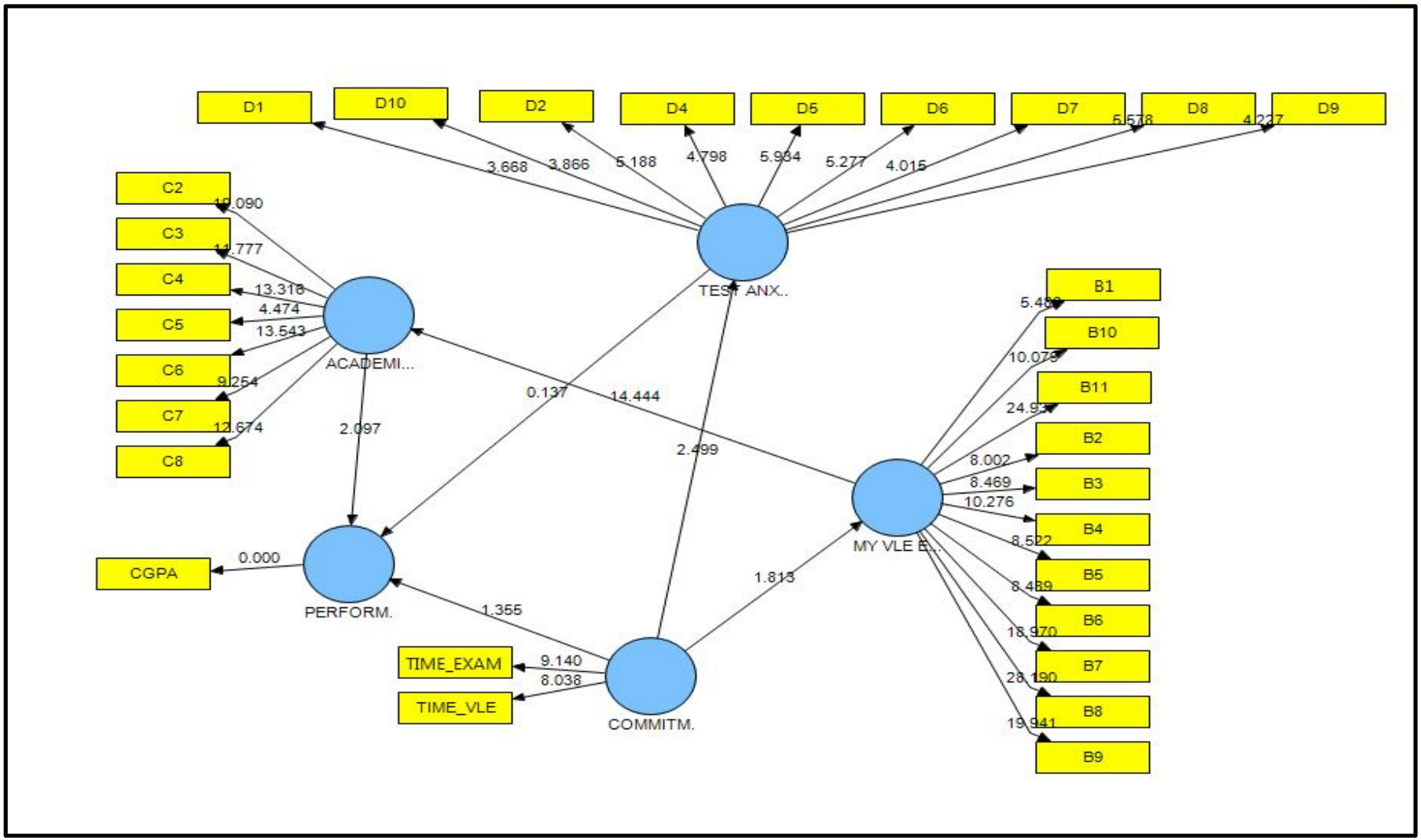
MEASUREMENT FOR TEST ANXIETY

NO	STATEMENT
D1	Thoughts of doing poorly interfere with my performance on examinations
D2	During an examination I frequently get so nervous that I forget facts I really know
D3	While taking an important exam, I perspire a great deal
D4	During examinations, I find myself thinking of things unrelated to the actual study material
D5	I feel very panicky when I have to take an exam
D6	After important tests, I am frequently so tense that my stomach gets upset
D7	I usually feel my heart beating very fast during an exam
D8	I usually get very depressed after taking an exam
D9	I wish examinations did not bother me so much
D10	Even when I'm well prepared for a test, I feel very anxious about it

RELIABILITY AND CONVERGENT VALIDITY

CONSTRUCTS	AVERAGE VARIANCE EXTRACTED	CRONBACH ALPHA
DESIRED	> 0.40 (Hulland, 1999)	> 0.60 (Zikmund et al., 2010)
ACADEMIC COMPETENCY	0.48	0.82
COMMITMENT	0.75	0.66
MY VLE EXPERIENCE	0.51	0.90
PERFORMANCE	0.99	0.99
TEST ANXIETY	0.52	0.89

STRUCTURAL EQUATION MODEL



ANALYSIS AND RESULTS

No	HYPOTHESIS STATEMENT	T-value	P- value
H1	There is a relationship between my VLE experience and academic competency	14.44	0.01**
H2	There is a relationship between academic competency and performance	2.10	0.02**
H3	There is relationship between commitment and performance	1.36	0.09*
H4	There is a relationship between commitment and my VLE experience	1.81	0.04**
H5	There is a relationship between commitment and test anxiety	2.50	0.01**
H6	There is a relationship between test anxiety and performance	0.14	0.44

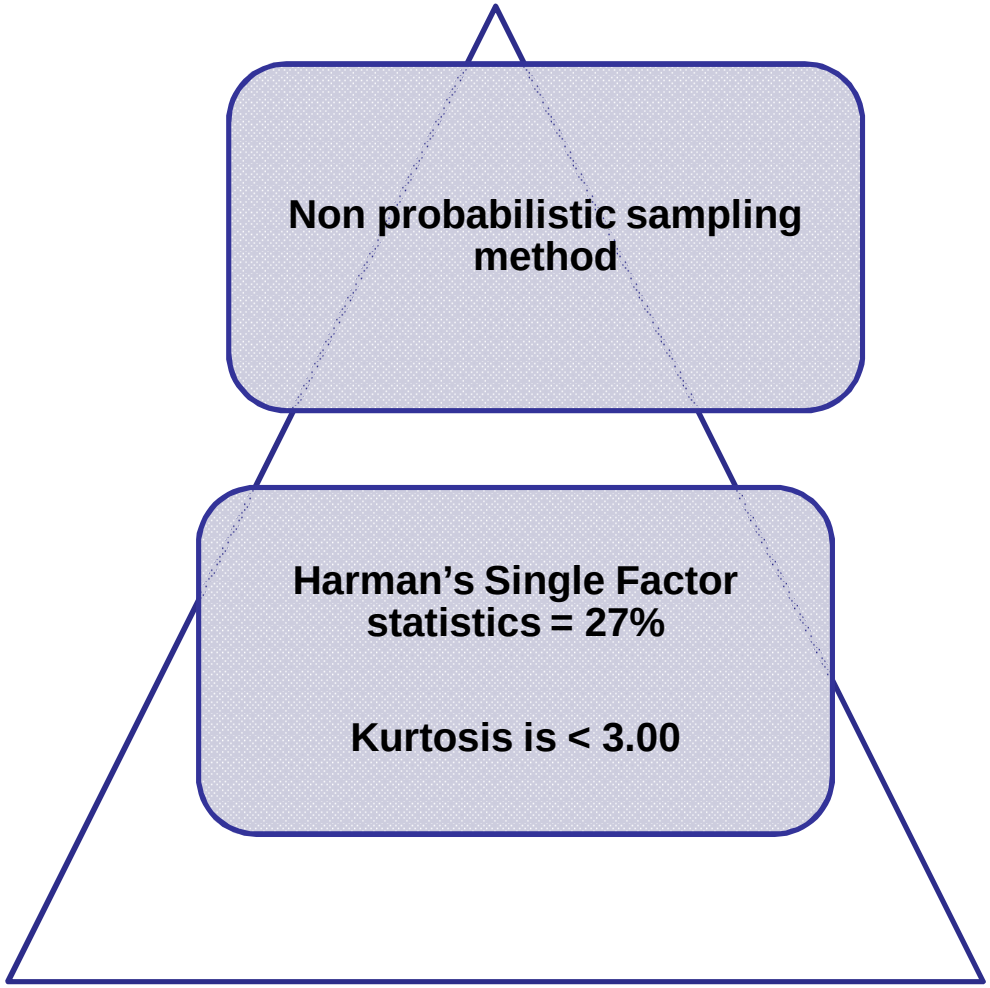
** P < 0.05 Significant

* P < 0.10 Moderately Significant

DISCUSSION AND IMPLICATION

- VLE can improve learners competency
- Improved learner competency can lead to better performance (CGPA)
- learners commitment on spending time on the myVLE and studying for exam can lead to better performance (CGPA)
- If learners spend much time on my VLE and studying for exam, anxiety can be significantly reduced.
- Some people have anxiety and nothing can be done. Anxiety cannot affect performance (CGPA)
- Theory is verified

LIMITATIONS



CONCLUSION: RELATE TO OUR LOGO!